

REDACTED - FOR PUBLIC INSPECTION

Jean L. Kiddoo
Phone: 202-373-6034
Fax: 202-373-6001
jean.kiddoo@bingham.com

March 26, 2012

FILED/ACCEPTED

VIA HAND DELIVERY

MAR 26 2012

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street S.W.
Washington, DC 20534

Federal Communications Commission
Office of the Secretary

Ms. Sandra K. Danner
Broadband Division
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street S.W., Room 3A-266
Washington, DC 20554

Re: Reply of T-Mobile, USA, Inc. to Opposition to Petition to Deny
WT Docket No. 12-4

Dear Ms. Dortch and Ms. Danner:

Pursuant to the First and Second Protective Orders (together "Protective Order") issued in the above-referenced proceedings on January 17, 2012,¹ please find attached a **redacted version** of the Reply to Opposition to Petition to Deny ("Reply") the Application of Cellco Partnership d/b/a Verizon Wireless and SpectrumCo LLC for Consent to Assign Licenses and Application of Cellco Partnership d/b/a Verizon Wireless and Cox TMI Wireless, LLC for Consent to Assign License (collectively, "Applications"), filed in the above-referenced docket, which contains certain confidential and proprietary information related to T-Mobile, USA, Inc. ("T-Mobile").

T-Mobile seeks Confidential and Highly Confidential treatment of certain information set forth in the Reply under the Protective Order. The information marked in the Reply is entitled to confidential, non-public treatment under the Freedom of Information Act (FOIA) and related provisions of the Commission's rules. See 47 C.F.R. §§ 0.457 and 0.459; 5 U.S.C. § 552, *et seq.* The information marked Confidential contains T-Mobile business planning and other confidential information, including third party confidential information, and the information marked Highly Confidential refers to Highly Confidential agreements submitted by Applicants into the record herein.

¹ See *Application of Cellco Partnership d/b/a Verizon Wireless and SpectrumCo LLC for Consent to Assign Licenses and Application of Cellco Partnership d/b/a Verizon Wireless and Cox TMI Wireless, LLC for Consent to Assign License*, WT Docket No. 12-4, DA 12-50 (rel. Jan. 17, 2012) ("Protective Order").

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T-Mobile treats the Confidential network information in the Reply as confidential and does not customarily release such information to the public. The Highly Confidential information is held only by T-Mobile's outside counsel and consultants who have signed the appropriate acknowledgements of confidentiality. Information in the possession of a public entity is considered to be "Confidential" if disclosure is likely to substantially harm the competitive position of the person from whom the information was obtained.²

In support of its request for confidential treatment of the Reply, T-Mobile submits the following more specific information pursuant to FCC Rule 0.459:

(1) Identification of Confidential Materials: T-Mobile seeks confidential treatment for certain network information set forth in the Reply. Pursuant to the Protective Order, T-Mobile has marked each page of the non-redacted version of this filing with the legend, as applicable: "**CONFIDENTIAL INFORMATION - SUBJECT TO PROTECTIVE ORDER IN WT DOCKET NO. 12-4 BEFORE THE FEDERAL COMMUNICATIONS COMMISSION**" or "**HIGHLY CONFIDENTIAL INFORMATION - SUBJECT TO PROTECTIVE ORDER IN WT DOCKET NO. 12-4 BEFORE THE FEDERAL COMMUNICATIONS COMMISSION.**" Each page of the redacted version of this filing is marked with the legend "**REDACTED - FOR PUBLIC INSPECTION.**"

(2) Circumstances Giving Rise to Submission of Information: To provide relevant market information to the Commission in order to facilitate its review of the Applications in the above-referenced Commission docket, T-Mobile voluntarily provides the confidential information provided in the Reply.

(3) Degree to Which Information is Commercial or Financial: The information in the Reply includes confidential information about T-Mobile's business. This information is sensitive commercial information as it contains information concerning T-Mobile's business operations. T-Mobile treats this data as confidential and would not submit the data to the Commission without assurances that the information will be kept confidential. The information marked Highly Confidential relates to information that Applicants have asserted is confidential to their businesses and that they filed as Highly Confidential pursuant to the Protective Order.

² See *National Parks and Conservation Ass'n v. Morton*, 498 F.2d 765, 770 (D.C. Cir. 1974); *Critical Mass Energy Project v. Nuclear Regulatory Commission*, 975 F.2d 871, 873 (D.C. Cir. 1992).

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(4) Degree to Which the Information Concerns a Service Subject to Competition: The Reply contains information about T-Mobile's business. Such information is directly related to T-Mobile's service offerings which are subject to substantial competition from numerous other communications service providers, particularly wireless providers. The information marked Highly Confidential relates to information that the Applicants have asserted is confidential to their businesses and that they filed as Highly Confidential pursuant to the Protective Order.

(5) How Disclosure Could Result in Substantial Harm: Disclosure of T-Mobile's network design information and related highly confidential information would enable T-Mobile's competitors to determine sensitive information concerning the Company's business plans. The information marked Highly Confidential relates to information that the Applicants have asserted is confidential to their businesses and that they filed as Highly Confidential pursuant to the Protective Order.

(6) Measures Taken to Prevent Disclosure: T-Mobile holds the information provided in this submission in strict confidentiality and, with respect to the Highly Confidential information, it is held only by T-Mobile's outside counsel and consultants who have signed the appropriate acknowledgements of confidentiality.

(7) Public Access to Information, Third Party Disclosure: T-Mobile has not made this information publicly available through previous disclosures.

(8) Justification of the Period During Which the Material Should Not be Publicly Available: T-Mobile requests that the Commission hold the Confidential information out of public view for five years or until such earlier time as the information may otherwise be made public by T-Mobile. It requests that the Commission hold the Highly Confidential information for a period of time commensurate with the holding period for the Highly Confidential information submitted by Applicants to which it relates.

Based on the foregoing, T-Mobile requests confidential treatment of designated portions of the Reply pursuant to FCC Rules 0.457 and 0.459 and the Protective Order.

Pursuant to the Protective Order, T-Mobile is delivering two copies of the confidential version of this filing, via courier, to Ms. Sandra K. Danner with the Broadband Division of the Commission's Wireless Telecommunications Bureau. One copy of the confidential version and two public, redacted versions of this filing are also being filed by courier with the Secretary's Office. One copy of the public version of this filing is being filed electronically through the Commission's Electronic Comment Filing System. Finally, one copy of the confidential version of this filing is being transmitted by courier to the Commission's Secretary's Office for time-stamp return by courier to the undersigned counsel.

Boston
Hartford
Hong Kong
London
Los Angeles
New York
Orange County
San Francisco
Santa Monica
Silicon Valley
Tokyo
Walnut Creek
Washington

Bingham McCutchen LLP
2020 K Street NW
Washington, DC
20006-1806

T 202.373.6000
F 202.373.6001
bingham.com

Ms. Marlene H. Dortch
Ms. Sandra K. Danner
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Should you have any questions, please contact the undersigned.

Very truly yours,

/s/ Jean L. Kiddoo

Jean L. Kiddoo

Counsel for T-Mobile, USA, Inc.

Boston
Hartford
Hong Kong
London
Los Angeles
New York
Orange County
San Francisco
Santa Monica
Silicon Valley
Tokyo
Walnut Creek
Washington

Bingham McCutchen LLP
2020 K Street NW
Washington, DC
20006-1806

T 202.373.6000
F 202.373.6001
bingham.com

A/74844363.2

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Application of Cellco Partnership d/b/a)
Verizon Wireless and SpectrumCo LLC)
For Consent To Assign Licenses)

WT Docket No. 12-4

Application of Cellco Partnership d/b/a)
Verizon Wireless and Cox TMI Wireless, LLC)
For Consent To Assign Licenses)

REPLY OF T-MOBILE, USA, INC. TO OPPOSITION TO PETITION TO DENY

Thomas J. Sugrue
Kathleen O'Brien Ham
Steve B. Sharkey
Luisa L. Lancetti
Joshua L. Roland
Christopher A. Wiczorek
T-MOBILE USA, INC.
601 Pennsylvania Ave., N.W.
North Building, Suite 800
Washington, DC 20004
Tel: (202) 654-5900
Email: tom.sugrue@T-Mobile.com
kathleen.ham@T-Mobile.com
steve.sharkey@T-Mobile.com
luisa.lancetti@T-Mobile.com
josh.roland@T-Mobile.com
chris.wiczorek@T-Mobile.com

Andrew D. Lipman
Jean L. Kiddoo
BINGHAM MCCUTCHEN LLP
2020 K Street, N.W.
Suite 1100
Washington, DC 20006-1806
Tel: (202) 373-6034
Fax: (202) 373-6001
Email: andrew.lipman@bingham.com
jean.kiddoo@bingham.com

Counsel for T-Mobile, USA, Inc.

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SUMMARY

Applicants' responses to the various petitions to deny their proposed license assignments are insufficient to carry their burden of proof that the Transactions would be consistent with the public interest, convenience, and necessity. In an effort to show public benefits from the Transactions, they reiterate the well known industry-wide need for spectrum resources to satisfy growing consumer demand for mobile broadband services. However, such generalized benefits would be realized whenever any carrier obtains any additional spectrum – and in this case, would be substantially greater if virtually any carrier other than spectrum-rich Verizon acquired the frequencies at issue. In any event, such general claims of putative benefits cannot outweigh the specific and substantial harms to competition and the public interest that would result from these Transactions as demonstrated in the record of this proceeding.

Applicants' claim that Verizon Wireless "needs" additional spectrum to meet its customers' specific demands also rings hollow. Verizon Wireless already holds more valuable spectrum than any other carrier. The record shows it has not even started using the AWS spectrum it acquired in 2006, and – even after the Transactions were announced – it has been telling investors and the public that its LTE network is barely being utilized and it has no pressing need for any additional spectrum in the near-term and no need even beyond that for additional spectrum on a nationwide basis. Moreover, Applicants' claim that Verizon Wireless uses its existing spectrum "efficiently" (and, in particular, more efficiently than T-Mobile uses its spectrum) collapses upon closer examination. As an initial matter, their analysis oversimplifies in a way that biases its results by presenting aggregated nationwide data, when in fact cellular networks are designed and deployed market by market, so that spectral efficiency can and does vary significantly from one market area to the next. More fundamentally, Applicants' spectral efficiency metric is invalid in two critical respects. It falsely assumes that all wireless users place equal demands on the network and that all spectrum is created equal. T-Mobile's network

serves a higher proportion of smartphone users, which require more spectrum to serve, than does Verizon Wireless' network, and it also uses higher-band spectrum that is inherently less efficient. When adjusted for these two factors, the data demonstrates that T-Mobile's spectral efficiency exceeds Verizon Wireless' in a majority of markets, by an average of more than 50 percent.

Moreover, Applicants fail to respond meaningfully to the demonstrated potential harms of the Transactions to full competition in wireless service markets. Applicants repeatedly try to persuade the Commission to limit itself to a short-term analysis, arguing that since the Transactions will not change the existing market shares, they cannot cause any harm. The more appropriate analysis, however, must take account of longer-term consequences in the market if a large carrier is permitted to acquire an excessive concentration of spectrum with the potential result of foreclosing its rivals' expansion and increasing their costs. Applicants' criticisms of T-Mobile's economic evidence do not refute its basic point: economic theory recognizes that the interests of the largest firm in a market seeking control of a critical, scarce input are not coincident with the interests of consumers. Further, their economic rebuttal is riddled with errors and oversimplifications.

The Commission should not allow its review of these Transactions to be hamstrung by mechanistic reliance on an outmoded spectrum screen. The Commission's statutory obligation is to determine whether license assignments are consistent with the public interest, and the spectrum screen is merely a diagnostic tool to assist in that determination. The harms to competition from this particular deal are demonstrable without any invocation of a spectrum screen at all. But if, nevertheless, the Commission decides to use a spectrum screen methodology in this case, it should make adjustments to the present screen to make it consistent with marketplace and technological realities. Past cases establish that the Commission can and does adjust the screen in response to changing conditions. Since the spectrum screen, in its current form, no longer provides an accurate assessment of the markets where competitive harms may result if the

transaction is granted, it must be modified to ensure that it fulfills the Commission's policy and statutory public interest goals.

In particular, the Commission should adopt value-weighting of spectrum as proposed in T-Mobile's Petition to Deny. The current screen is based on the dubious assumption, which even Applicants admit is false, that all spectrum is equally valuable. Arms-length market transactions have already established (and are constantly updating) the relative values of different bands of spectrum. These relative prices effectively reflect the relative contributions of each band to producing wireless service valued by consumers.

Finally, the Commission should reject Applicants' pleas to ignore the separate commercial agreements between Verizon Wireless and the cable applicants. If these commercial agreements contain terms that are relevant in determining how the public interest would be affected by the license transfers, then they are within the scope of the Commission's review of those transfers. The intertwining of the interests of Verizon Wireless and the cable companies, which are dominant providers of both wireline broadband access and multi-channel video programming services within their respective footprints, and in some cases also control extensive programming content, raises many potential concerns that merit further investigation. The Commission should continue to scrutinize both the express terms and the practical impacts of these agreements to determine whether they are really independent of the spectrum transfers, as the Application claims in direct contradiction with the statement of an officer of one of the Applicants, or whether they are designed to cement the Applicants' positions in their respective markets while deterring or foreclosing others from competing effectively in those markets.

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**Before the
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In the Matter of)	
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Verizon Wireless and SpectrumCo LLC)	
For Consent To Assign Licenses)	WT Docket No. 12-4
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Verizon Wireless and Cox TMI Wireless, LLC)	
For Consent To Assign Licenses)	

REPLY OF T-MOBILE, USA, INC. TO OPPOSITION TO PETITION TO DENY

T-Mobile, USA, Inc. (“T-Mobile”), by its undersigned counsel, hereby replies to the Joint Opposition to Petitions to Deny and Comments (hereinafter “Opposition”), filed March 2, 2012, by Verizon Wireless, SpectrumCo, and Cox (“Applicants”), in the above-captioned docket.

I. INTRODUCTION

In its Petition to Deny, filed February 21, 2012, T-Mobile demonstrated that the proposed transfer of AWS spectrum from SpectrumCo LLC and Cox TMI Wireless to Verizon Wireless (the “Transactions”) would be contrary to the public interest standard of Section 310(d) of the Communications Act, 47 U.S.C. § 310(d) (the “Act”). In particular, the Transactions would result in an unacceptable accumulation of spectrum by Verizon Wireless, which already has extensive spectrum holdings that it is not yet using. Verizon Wireless has an economic incentive to acquire additional spectrum whether it needs it or not, in order to foreclose opportunities for new carriers to enter the market, or for existing rivals to expand capacity and introduce new services and capabilities. The acquisition of spectrum to foreclose competition, either in whole or in part, is contrary to the public interest and should not be approved by the Commission.

Applicants have raised a variety of objections in response to T-Mobile's and other petitions to deny. In reviewing these objections, however, the Commission should bear in mind that Applicants, not T-Mobile and other petitioners, have the burden of proof in this proceeding.¹ The Applications cannot be approved unless Applicants affirmatively demonstrate that their proposed Transactions would be in the public interest. This they have utterly failed to do. Indeed, a fair evaluation of the record of this proceeding demonstrates that consummation of the Transactions would undermine competition in mobile broadband services and be contrary to the public interest. The Commission should reject these Applications.

II. APPLICANTS HAVE OVERSTATED THE POTENTIAL BENEFITS OF THE TRANSACTIONS

A. Generalized Benefits of Spectrum Utilization Are Insufficient to Overcome Transaction-Specific Harms to Competition

The centerpiece of the Opposition is Applicants' enthusiastic description of the supposed public benefits of the Transactions. As they did in their Applications, they reiterate the well-known industry-wide need for spectrum resources to satisfy growing consumer demand for mobile broadband services.² Further, they contend that Verizon Wireless "needs spectrum" to deliver these services to its customers.³

¹ See, e.g., *Application of AT&T Inc. and Qualcomm Inc. for Consent to Assign Licenses and Authorizations*, Memorandum Opinion and Order, WT Docket No. 11-18, FCC 11-18, at para. 23 (2001) ("*AT&T-Qualcomm Order*"); *Applications of Cellco Partnership d/b/a Verizon Wireless and Atlantis Holdings LLC for Consent to Transfer Control of Licenses, Authorizations and Spectrum Manager and De Facto Transfer of Leasing Arrangements and Petition for Declaratory Ruling that the Transaction is Consistent with Section 310(b)(4) of the Communications Act*, Memorandum Opinion and Order and Declaratory Ruling, 23 FCC Rcd 17444, at para. 26 (2008) ("*Verizon Wireless-ALLTEL Order*").

² Joint Opposition to Petitions to Deny and Comments, filed by Cellco Partnership d/b/a Verizon Wireless, SpectrumCo, LLC, and Cox TMI Wireless, LLC, WT Docket No. 12-4, at 5-8 (filed March 2, 2012) ("*Opposition*").

³ Opposition at 12-23.

At one level, there is nothing new or surprising about this – for example, every carrier in the industry faces rapidly rising demand for broadband data and could argue that it would benefit from increasing its spectrum. Indeed, the types of generalized benefit claims advanced by the Applicants could be asserted literally for *any* acquisition of spectrum by *any* carrier, since every carrier could argue, quite truthfully, that any additional spectrum it might acquire might be used to provide more and better broadband service to its customers at some point, even if well into the future. The logical consequence of accepting the argument that any benefit to the Applicant is by itself sufficient to satisfy the public interest requirement would be to nullify the Commission’s pro-competition policy.

For similar reasons, Applicants’ invocation of the Commission’s secondary market policy does nothing to overcome showings of transaction-specific harm.⁴ The general policy in favor of free purchase and sale of spectrum to promote economic efficiency is, of course, constrained by the countervailing policy goal of preventing combinations and aggregations that impair competition.⁵ Again, Applicants’ arguments go too far; justifying the purchase of spectrum merely by pointing to the secondary market policy does not meet the public interest test set forth by the Commission.

Rather than accepting their generalized claims at face value, the Commission should evaluate Applicants’ alleged benefits in the context of existing and foreseeable market conditions. To begin with, Verizon Wireless already holds more spectrum depth on a nationwide basis than any other carrier except Clearwire, whose spectrum is all in the bands above 2.5 GHz and is

⁴ Opposition at 8-12.

⁵ See, e.g., *Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations*, Memorandum Opinion and Order, 19 FCC Rcd 21522, at paras. 4-6 (2004) (“*AT&T-Cingular Order*”).

over 50% leased (*i.e.* its EBS spectrum).⁶ Verizon Wireless' aggregate spectrum holdings are far more valuable than Clearwire's or any other carrier's, and only AT&T's even approach it.⁷ Verizon Wireless already has an extensive LTE footprint, and already holds an average of 20 MHz of AWS spectrum across most of the United States, acquired in 2006, which it has not even deployed yet.⁸ It is not facing any immediate need for spectrum to deploy 4G broadband – quite the contrary. Verizon Wireless has said repeatedly that it has sufficient spectrum and is not in need of significant additional spectrum. As recently as this past November, Verizon Wireless was confidently reiterating this point.⁹ Lowell McAdam, Chief Executive Officer of Verizon Communications (the majority owner of Verizon Wireless), according to a press report, told investors only a few months before the Transactions were announced that “even when the day comes when the company needs more spectrum, . . . the company is in a good position, because it will likely only need additional spectrum in specific markets. ‘Even if we see high levels of adoption of data that we have forecast, high usage will mostly be in certain cities,’ he said. ‘So we can go in there with a rifle to pick off spectrum in specific markets, rather than take a shot gun approach.’”¹⁰ These Transactions, of course, represent precisely the “shot gun approach”

⁶ Deutsche Bank Markets Research, *US Telecom Services: Industry Update*, “Key Updates on Major Spectrum Deals,” Feb. 5, 2012.

⁷ Petition to Deny of T-Mobile, USA, Inc., WT Docket No. 12-4, at 3 (filed Feb. 21, 2012) (“T-Mobile Petition”).

⁸ Opposition at 13 (Verizon Wireless “will *soon begin* deploying its existing AWS spectrum holdings into the 4G LTE network . . .”) (emphasis supplied).

⁹ “How soon will wireless operators run out of capacity?,” *FierceWireless*, Nov. 3, 2011, available at www.fiercewireless.com/story/how-soon-will-wireless-operators-run-out-capacity/2011-11-03 (reporting on a presentation by Verizon Wireless Chief Technology Officer David Small at the Open Mobile Summit in November 2011).

¹⁰ “Verizon CEO talks up spectrum, downplays Sprint iPhone,” *CNET News*, Sept. 21, 2011, available at http://news.cnet.com/8301-30686_3-20109452-266/verizon-ceo-talks-up-spectrum-downplays-sprint-iphone/.

that McAdam deprecated. Even *after* the Applications were filed, Fran Shammo, Executive Vice President and Chief Financial Officer of Verizon Communications, told investment analysts that “the 4G network has a ton of capacity. Obviously, we only have 5% of our customers on it right now. So [we are running] a promotion to get people to move over to that 4G network.”¹¹

Other carriers face more severe spectrum constraints than Verizon Wireless. In particular, spectrum-constrained carriers like T-Mobile seeking to deploy 4G LTE networks while maintaining service to existing customers face significant technical and economic issues due to the need to re-farm spectrum without compromising quality of service to existing customers instead of relying on a warehouse of unused spectrum. Access to additional spectrum would significantly alleviate these impacts.¹²

While a Commission decision allowing Verizon Wireless to add the SpectrumCo and Cox AWS spectrum to its extensive spectrum holdings might in theory offer some potential benefits well in the future for the users of Verizon Wireless’ network, it will also allow Verizon Wireless to pre-empt any other potential use of that spectrum, to the detriment of consumers. The Commission should therefore weigh both of these future effects in its wide-ranging and forward-looking evaluation of the transaction when applying the public interest test under Section 310(d):

¹¹ VZ-Verizon at Deutsche Bank Media and Telecommunications Conference, Feb. 27, 2012, Transcript at 5, *available at* http://www22.verizon.com/idc/groups/public/documents/adacct/db_vz_transcript_2012.pdf.

¹² T-Mobile Petition at 3-5, 35-36; Declaration of Neville R. Ray (Ex. B to T-Mobile Petition), at para. 4 (“Ray Declaration”). Contrary to Applicants’ facile argument, T-Mobile did not suggest that the Commission should ignore section 310(d) of the Act and consider whether the public interest would be better served by a transfer of AWS spectrum to a purchaser other than Verizon Wireless. *See* Opposition at 63-64. Rather, T-Mobile presented information concerning spectrum constraints affecting both itself and other carriers to demonstrate both that the “public benefits” claimed by the Applicants are greatly exaggerated, and that allowing Verizon Wireless to assemble an even more dominant spectrum portfolio would likely stunt the growth of the industry as a whole, to the detriment of consumers.

By contrast [to DOJ's merger review], the Commission's review of the competitive effects of a transaction under the public interest standard is broader: for example, it considers whether a transaction will enhance, rather than preserve, existing competition, and take a more extensive review of potential and future competition and the impact on the relevant market, including longer-term impacts.¹³

Here, even if Applicants' claims were taken completely at face value, at most they would show that the Transactions would not reduce the number of existing sellers of wireless services in the short run;¹⁴ they have not even purported to claim that they would enhance competition in the long run.

To the contrary, as shown in the Petitions to Deny, the likelihood is that approval of the Transactions would result, over time, in slower growth, reduced innovation, higher costs, and less robust competition from rivals of Verizon Wireless, and therefore less choice for consumers of wireless services. The incremental and distant benefits that Applicants claim will result from the proposed spectrum transfer cannot outweigh these significant near- and long-term harms.

B. The Transactions Will Increase Both Verizon Wireless' Ability and its Incentive to Use Spectrum Wastefully

Applicants spend a considerable portion of their Opposition attempting to prove that Verizon Wireless has not been warehousing spectrum because, they allege, its ratio of customer connections per MHz of spectrum allocated is higher than that of T-Mobile and some other

¹³ *AT&T-Qualcomm Order* at para. 25; see also *AT&T Inc. and Cellco Partnership d/b/a Verizon Wireless for Consent to Assign or Transfer Control of Licenses and Authorizations and Modify a Spectrum Leasing Arrangement*, Memorandum Opinion and Order, 25 FCC Rcd 8704, at para. 24 (2010) ("*AT&T-Verizon Order*"); *Applications of AT&T Inc. and Centennial Communications Corp. for Consent to Transfer Control of Licenses*, Memorandum Opinion and Order, 24 FCC Rcd 13915, at para. 29 (2009) ("*AT&T-Centennial Order*"); *Verizon Wireless-ALLTEL Order* at para. 28; *Applications of Sprint Nextel Corporation and Clearwire Corporation for Consent to Transfer Control of Licenses, Leases, and Authorizations*, Memorandum Opinion and Order, 23 FCC Rcd 17570, at para. 21 ("*Sprint-Clearwire Order*"); and *AT&T-Cingular Order* at para. 42 (2004).

¹⁴ See, e.g., Opposition at 41, 45-47 (emphasizing that the Transactions will not result in a reduction in the number of competitors in any market).

carriers.¹⁵ In attempting to refute warehousing allegations, however, Applicants notably evade the central point: that – unlike T-Mobile and others – Verizon Wireless has been sitting on a large block of unused AWS spectrum for *more than five years*. Verizon Wireless has done virtually nothing with the AWS spectrum since acquiring it at auction in 2006. This is despite the fact that Verizon Wireless already holds 20 MHz of AWS spectrum covering about 2/3 of the country.¹⁶

By contrast, commencing immediately after the auction, T-Mobile went to great lengths and expense to clear the AWS spectrum of legacy users, achieving this goal in a mere two years –much shorter than the 15-year build-out period for the licenses, which is an exceptionally long period by normal licensing standards, reflecting the Commission’s concerns back when the auction took place about the time that would be needed to clear the spectrum of legacy government users.¹⁷ Significantly, T-Mobile’s efforts to clear the spectrum of legacy users also benefited other holders of AWS spectrum, not least among them Verizon Wireless, SpectrumCo and Cox. But despite T-Mobile’s having cleared the way, Verizon Wireless has failed to make use of this scarce and valuable public resource entrusted to it, and the Applications admitted that “Verizon Wireless has sufficient spectrum to meet its immediate needs, and generally to meet increased demands in many areas until 2015.”¹⁸

¹⁵ Opposition at 23-27.

¹⁶ Ray Declaration at para. 16.

¹⁷ Ray Declaration at para. 24.

¹⁸ Application of Cellco Partnership d/b/a Verizon Wireless and SpectrumCo LLC for Consent to Assign Licenses, File No. 0004993617, Description of Transaction and Public Interest Statement at 13; Application of Cellco Partnership d/b/a Verizon Wireless and Cox TMI Wireless, LLC for Consent to Assign Licenses, File No. 0004996680, Description of Transaction and Public Interest Statement at 12. Prior to announcing the Transactions, Verizon Wireless also emphatically stated that it had no need for significant spectrum other than in certain markets and therefore only needed a “rifle to pick off spectrum in specific markets, rather than take a shot gun approach.” See n. 10, *supra*. Even after firing this unnecessary shotgun, Applicants stated in

Unlike Verizon Wireless, T-Mobile *used* its AWS spectrum as quickly as possible to deploy services. In doing so, T-Mobile is making use of a number of costly, difficult and time-consuming techniques to make the maximum use of *all* of its spectrum while rolling out new advanced services (HSPA+ and LTE) with minimum disruption to its existing customers. These techniques are necessitated by the fact that T-Mobile lacks the spectrum “headroom” that enables Verizon Wireless simply to leave chunks of its spectrum fallow for years until it decides to roll out new services.¹⁹

Verizon Wireless does not – as indeed it could not – deny that, unlike T-Mobile, MetroPCS, Leap and Cincinnati Bell, it has sat on its AWS spectrum holdings for all these years. Instead, it argues that this waste of valuable and scarce spectrum should not trouble the Commission because, based on a carefully chosen (and, as we show below, fundamentally flawed) metric, Verizon Wireless purportedly uses its spectrum “more efficiently” than others, including T-Mobile.²⁰ It also asserts that, in any event, the Commission need not worry because the 15-year build-out period for the AWS spectrum has not expired.²¹

The second of these contentions is beside the point. Verizon Wireless may have fifteen years after 2006 to build out its *existing* AWS holdings before being required to forfeit them, but the forfeiture of its existing licenses is not at issue here. The issue here is whether Verizon Wireless should be allowed to add *even more* unused spectrum to its existing stockpile, or

their Application that the acquired AWS spectrum would not be needed in many areas until 2015, and for the first time in their Opposition, Applicants say that Verizon Wireless needs spectrum in “some” areas by 2013. Opposition at 3, 13. Neither the Application nor the Opposition explains why, between September and December 2011 Verizon Wireless suddenly developed a need for a shotgun approach nor do they demonstrate that Verizon does not have sufficient spectrum in its existing AWS or other greenfield spectrum or cannot accommodate such needs by undertaking measures to make its existing spectrum use more efficient.

¹⁹ T-Mobile Petition at 14; Ray Declaration at paras. 3, 16.

²⁰ Opposition at 23-27.

²¹ Opposition at 28.

whether doing so would unnecessarily restrict the supply of spectrum in the marketplace. In assessing whether the public interest will be served by this transaction, the Commission cannot ignore the fact that Verizon Wireless has let more than five years pass without using its existing AWS spectrum, while other users have moved mountains to clear legacy users, to deploy networks and develop equipment in order to use this spectrum as fast as possible. The Commission not only may, but *must*, ask whether Verizon Wireless should be allowed to continue and even to *expand* its waste of this precious public resource.²²

Even on its own terms, Applicants' simplistic "analysis" of Verizon Wireless' alleged spectrum efficiency as compared to the rest of the industry does not hold water. The attached declaration of Dennis Roberson sets forth in detail the flaws of Applicants' model, focusing by way of example on their comparison of Verizon Wireless with T-Mobile.²³ Initially, Applicants' analysis oversimplifies by presenting aggregated nationwide data, when in fact cellular networks are designed and deployed market by market, so that spectral efficiency can and does vary significantly from one market area to the next.²⁴ Such an overly simplistic approach is no more useful for gaining an understanding of the relative efficiency of spectrum use by a carrier than would be trying to glean insight into land use in New York or Los Angeles by averaging the total U.S. population over the land mass of the entire U.S. Given the wide variations of spectrum

²² Applicants argue elsewhere in the Opposition (*see* pp. 63-64) that the Commission may not consider the effect of its aggregation of spectrum on other carriers because of Section 310(d) of the Communications Act, which provides that in assessing transfer applications for spectrum, "the Commission may not consider whether the public interest, convenience, and necessity might be served by the transfer, assignment, or disposal of the permit or license to a person other than the proposed transferee or assignee." But at issue here is not whether another individual transferee is preferable. The issue is whether Verizon Wireless should be allowed to corner this critical asset to keep it away from the market at large, particularly when the likely effect of allowing it to do so will be to delay, not hasten, the deployment of full-fledged LTE by a multitude of competitors.

²³ Declaration of Dennis Roberson (attached as Exhibit A hereto) ("Roberson Declaration").

²⁴ Roberson Declaration at para. 7.

holdings and use in each market, a market-by-market look is necessary to gain any meaningful insight.

More fundamentally, Applicants' metric is itself invalid in two critical respects. It falsely assumes, first, that all wireless users place equal demands on the network and, second, that all spectrum is created equal.²⁵

First, Applicants' efficiency analysis fails to take into account the effect of different levels of smartphone penetration as between Verizon Wireless and T-Mobile. As Applicants themselves note in other contexts, smartphones can use up to 35 times as much data as feature-phones.²⁶ Notably, a JPMorgan report issued March 5, 2012, demonstrates that Verizon Wireless' smartphone deployment lags well behind that of the other three largest carriers, including T-Mobile.²⁷ When the far greater spectrum demands of smartphones are taken into account in 49 of the top-50 markets for which data exists (Verizon Wireless does not serve San Juan, PR, with owned spectrum), T-Mobile's spectrum efficiency exceeds that of Verizon Wireless in all 5 of the top 5 markets, and many more of the Top 49 markets.²⁸

²⁵ Additionally, Verizon Wireless has padded its comparison by including in T-Mobile's spectrum holdings the spectrum it has yet to receive from AT&T. Opposition at 25, n.62. Verizon Wireless plainly has attempted to bias the results in its favor here; the transfer of this spectrum to T-Mobile has not yet been approved and T-Mobile has had no opportunity to deploy it, so it is inaccurate to hold T-Mobile to a measure of "efficiency of use" based on spectrum that cannot yet be used. Not surprisingly (and inconsistently), Applicants do not hold Verizon Wireless to the same standard and have *not* included in its spectrum allotment the spectrum it would receive if these Transactions were approved. Opposition at 25, n.62.

²⁶ Opposition at 7.

²⁷ For example, the report shows that in the 4th quarter of 2011, T-Mobile had approximately 52% smartphone penetration compared to Verizon Wireless' approximately 40%. See Telecom, Cable and Satellite, Spectrum and Competition Overview, 4Q 2011 Wrap-Up and 2010 Outlook, J.P. Morgan, at 4 (Mar. 5, 2010).

²⁸ Roberson Declaration at para. 9. Professor Roberson also analyzed spectral efficiency using an alternative metric proposed by Applicants, the ratio of spectrum share to customer connections share. When the same corrections (outlined above) are made to this aspect of the

As T-Mobile showed in its Petition, and as Applicants admit elsewhere in their Opposition, the second assumption of spectral fungibility is also far from true. The record in this and other Commission proceedings is replete with evidence that spectrum below 1 GHz is substantially more suitable for wireless broadband, because of propagation and in-building penetration characteristics, than is spectrum above 1 GHz, and the Commission has recognized this disparity in a variety of contexts.²⁹

As Professor Roberson shows, Verizon Wireless' efficiency analysis is meaningless unless it is adjusted to take into account the difference in the characteristics of different spectrum bands. Low-band spectrum has better propagation than does high-band spectrum and, if all other factors are equal, provides higher received signal strength over a given cell area. Additionally, low-band spectrum has better building penetration properties. All in all, if an appropriate area spectrum efficiency metric for wide-area cellular systems is used, as Professor Roberson demonstrates, low-band spectrum provides higher bits-per-second over a cell, and therefore higher spectrum efficiency.³⁰

Technical analyses cited by Professor Roberson establish that the propagation characteristics of low-band (below 1 GHz) spectrum permit a carrier to deliver roughly 10 dB more received signal power to locations within a same-sized cell as a system using AWS spectrum.

Verizon analysis – i.e., adjusting for current spectrum holdings, spectrum propagation characteristics, and smartphone demands – this metric did not provide significantly different results than the customers-per-MHz analysis. Roberson Declaration at para. 21. Finally, Professor Roberson showed that the same holds true whether you consider both carriers' spectrum holdings before pending acquisitions or, on a pro forma basis, their holdings should such acquisitions be effected. Roberson Declaration at paras. 14-16, 24-27.

²⁹ See, e.g., *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless Including Commercial Mobile Services*, Fifteenth Annual Report, 26 FCC Rcd 9664, at para. 292 (2011) ("*Fifteenth Annual Report*").

³⁰ Roberson Declaration at paras. 10-11.

This means that the low-band system can provide roughly twice as many bps/Hz over a given cell area as the AWS system, corresponding with higher spectral efficiency.³¹ Thus, to correct Verizon Wireless' overly simplistic methodology, Professor Roberson adjusts both Verizon Wireless' and T-Mobile's spectrum holdings by a factor of 0.5 for AWS/PCS spectrum.³² When this adjustment is made along with the adjustment for smartphone penetration, Verizon Wireless' supposed advantage is completely reversed: 8 of the top 10 markets, and 33 of the Top 49 markets, and averaged over these markets, T-Mobile's efficiency exceeds that of Verizon Wireless by more than 50% percent.³³

Applicants further try to defuse the argument that Verizon Wireless has been engaged in warehousing spectrum by asserting that it is merely "rationalizing" its holdings:

Verizon Wireless actively participates in the secondary market as a seller as well as a buyer, contrary to unsubstantiated claims that it is warehousing spectrum. In the past five years, Verizon Wireless has transferred nearly 40 licenses to carriers of all sizes as it worked to rationalize its spectrum holdings³⁴

Any facial plausibility this assertion might have, however, is belied by the facts. In fact:

- Since May of 2007, Verizon Wireless has made assignments or transfers of licensees covering approximately 20.3 million POPs and 237 million MHz-POPs.³⁵

³¹ Roberson Declaration at para. 11.

³² This is different than the value-based weighting used by Professor Cramton for a different purpose, as discussed in Sections III.C and III.D below. Professor Roberson's weighting is designed to measure only the differing propagation characteristics of spectrum, and not any other factors that affect value. Roberson Declaration at 12 and n. 10.

³³ Roberson Declaration at para. 13 and Table 2.

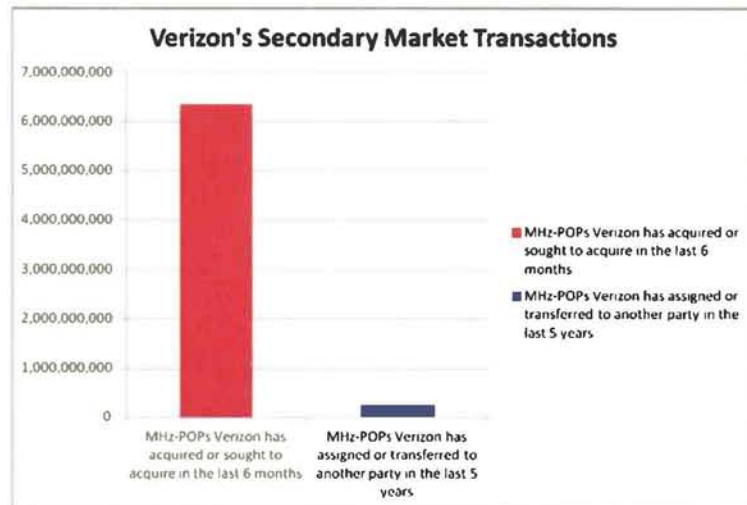
³⁴ Opposition at 10 (footnotes omitted).

³⁵ Opposition at Ex. 1.

- But in the last six months alone – and not including the pending SpectrumCo/Cox deals – Verizon Wireless has acquired or sought to acquire licensees or assignments covering approximately 49 million POPs and 573 million MHz-POPs, more than twice as much as it transferred away in the full five year period.³⁶
- Including the SpectrumCo/Cox deals increases Verizon’s 6 month spectrum spending spree to 334 million POPs and 6.352 billion MHz-POPs.³⁷

These results are summarized in Figure 1 below. In other words, in the last six months alone, Verizon Wireless has acquired or proposed to acquire approximately *twenty-seven* times as much spectrum as it transferred away in the entire last five years. This is hardly the picture of modest “rationalizing” of spectrum but clearly the portrait of a company eager to lock up as much spectrum as it possibly can.

FIGURE 1



³⁶ Information compiled from the Commission’s ULS and Verizon’s FRN numbers.

³⁷ *Key Updates on Major Spectrum Deals*, Deutsche Bank Markets Research (Feb. 5, 2012) at 11, Fig. 3.

In short, Applicants have completely ducked Verizon Wireless' track record in warehousing its existing AWS spectrum for five years. When the flaws in its analysis are addressed and corrected, Applicants' claim that Verizon Wireless has used its generous supply of spectrum efficiently turns out to be wrong – and instead provides a further basis for finding that it would be contrary to the public interest to allow Verizon Wireless to further corner this scarce and critical resource.

III. APPLICANTS HAVE FAILED TO ADDRESS THE POTENTIAL COMPETITIVE HARMS OF THE TRANSACTIONS

Under Section 310(d) of the Communications Act of 1934 (the “Act”), the Applicants “bear the burden of proving, by a preponderance of the evidence, that the proposed transaction, on balance, will serve the public interest.”³⁸ In making this determination, the Commission must “consider whether [the merger] could result in public interest harms by substantially frustrating or impairing the objectives or implementation of the Communications Act or related statutes [and] then employ a balancing test weighing any potential public interest harms of the proposed transaction against any potential public interest benefits.”³⁹

In their Opposition, Applicants attempt to discount the potential public interest harms of the Transactions demonstrated by T-Mobile and other petitioners, but their arguments for the most part ask the Commission to ignore the most significant indicators of competitive harm.

A. The Commission Should Consider Both Current and Future Competitive Impacts in its Analysis of the Transactions

A consistent theme of Applicants is that the Transactions will not cause any competitive harm because they will not change existing market shares, and therefore will not have any impact

³⁸ *AT&T-Qualcomm Order* at para. 23 (citations omitted); *Verizon Wireless-ALLTEL Order* at para. 26 (citations omitted).

³⁹ *AT&T-Qualcomm Order* at para. 23 (citations omitted); *see also Verizon Wireless-ALLTEL Order* at para. 26 (citations omitted).

on the current level of competition in the market.⁴⁰ This argument requires the Commission to focus exclusively on a snapshot of the market at one point in time, and ignore a full analysis of the likely “but-for” world and the effects of the Transactions on future competition.

Applicants simply state the obvious when they assert that the Transactions will not *immediately* alter market shares or the number of competitive choices available to consumers because the spectrum being transferred is not currently in use. That does not mean, however, that the Commission should ignore the negative consequences for competition in both the near- and longer-term of allowing Verizon Wireless to amass an even more dominant position in spectrum holdings than it currently enjoys. A spectrum sale that eliminates an opportunity for smaller carriers to expand their operations may be anti-competitive even if it does not immediately eliminate an existing competitor.

Analysis of the effects of a transaction on competition must be forward-looking and dynamic, not static. As noted above, the Commission has declared that its public interest standard under Section 310(d) includes “a more extensive review of potential and future competition and the impact on the relevant market, including longer-term impacts.”⁴¹ Similarly, merger analysis under the antitrust laws (which the Commission has often cited as instructive of, though not binding upon, its public interest review⁴²) must take into account foreseeable future trends, not only current market shares.

⁴⁰ Opposition at 41, 42, 45-47.

⁴¹ See n. 13, above.

⁴² *Verizon Wireless-ALLTEL Order* at para. 28 (The Commission’s “competitive analysis, which forms an important part of the public interest evaluation, is informed by, but not limited to, traditional antitrust principles”); see also *Sprint-Clearwire Order* at para. 21; *XM Satellite Radio Holdings Inc. and Sirius Satellite Radio Inc. for Transfer of Control of Licenses*, Memorandum Opinion and Order and Report and Order, 23 FCC Rcd 12348, at para. 32 (2008); *Applications of Celco Partnership d/b/a Verizon Wireless and Rural Cellular Corp. for Consent to Transfer of Control of Licenses, Authorizations and Spectrum Manager Leases*, Memorandum Opinion and Order and Declaratory Ruling, 23 FCC Rcd 12463, at para. 29 (2008); *Application*

Although T-Mobile continues to believe that the mobile services industry today is competitive,⁴³ the Commission's focus in this proceeding must be on whether that vigorous competition will continue in the long term, and Applicants' only attempt to address the long-term consequences of the Transactions is to repeat their mantra that customers "will have the same competitive choices post-transaction as they do today[.]"⁴⁴ However, T-Mobile showed in its Petition to Deny that the long-term result would be less competition if Verizon Wireless gains sufficient control of an essential input (spectrum) to enable it to prevent its competitors from increasing output in response to demand.⁴⁵ As Professor Chevalier states in her Supplemental Declaration attached hereto, "Any firm that holds large amounts of spectrum potentially has incentives to withhold and foreclose competitors."⁴⁶ The potential for a large incumbent to gain by hoarding spectrum, or any other scarce input, is well-understood in the economic literature.⁴⁷ Applicants essentially ignore this evidence in the body of their Opposition, relegating it only to

of AT&T Inc. and Dobson Communications Corp. for Consent to Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order, 22 FCC Rcd 20295, at para. 13 (2007) ("AT&T-Dobson Order").

⁴³ Applicants cite the recent Congressional testimony of T-Mobile's chief executive officer describing the current state of competition in the market. Opposition at 48. They then seek to leap from this statement about existing competition to a conclusion that the market would continue to be equally competitive even after the proposed spectrum transfer, which is not supported either by the cited testimony or by any other evidence they have offered.

⁴⁴ Opposition at 49.

⁴⁵ Declaration of Professor Judith Chevalier (Ex. A to T-Mobile Petition) at para. 37.

⁴⁶ Supplemental Declaration of Professor Judith Chevalier (copy attached hereto as Exhibit B), at para. 5 ("Chevalier Supp. Declaration").

⁴⁷ Chevalier Supp. Declaration at para. 8. Applicants' own economic expert, Professor Katz, has stated in published work that "a manufacturer is willing to take costly actions that serve to raise his rivals' costs." Chevalier Supp. Declaration at para. 9 and n. 14 (citing Michael L. Katz, "Vertical Contractual Relations," in *Handbook of Industrial Organization*, Vol. 1, Chapter 11, pp. 655-721 (R. Schmalensee and R.D. Willig eds., 1989), at 706).